THE APPLICATION OF TEXACO E & P INC. FOR INCREASED NET GAS OIL AUTHORITY FOR ITS “M” FEE-POWELL WELL NO. 1 IN THE BLALOCK LAKE, SE (WOLFCAMP) FIELD, GLASSCOCK COUNTY, TEXAS

Heard by: Donna K. Chandler on August 9, 2000

Appearances: Representing:
Mickey Olmstead Texaco E & P Inc.
Mike Reeves
Armando Madrid

EXAMINER’S REPORT AND RECOMMENDATION

STATEMENT OF THE CASE

Texaco E & P Inc. requests increased net GOR authority for its “M” Fee-Powell No. 1 in the Blalock Lake, SE (Wolfcamp) Field. Texaco requests a daily gas limit of 1,000 MCFD and cancellation of all accumulated overproduction for this well.

This application was unprotested and the examiner recommends approval of the increased net gas-oil ratio authority with a casinghead gas limit of 1,000 MCFD and cancellation of overproduction.

DISCUSSION OF EVIDENCE

The Blalock Lake, SE (Wolfcamp) Field was discovered in 1981 at a depth of 8,245 feet. There are 46 producing wells in the field. The top allowable in the field is 215 BOPD and 430 MCFD.

The “M” Fee-Powell No. 1 was completed in April 2000 with perforations at 8,282-8,300 feet. On initial test, the well produced 282 BOPD, 204 MCFD and 12 BWPD flowing through a 15/64” choke. Through June 2000, the well has produced a total of 16,500 BO and 46,900 MCF of gas.

The producing gas-oil ratio has been increasing over the life of the well. Initially, the gas-oil ratio was 723 cubic feet per barrel. Currently, the gas-oil ratio is approximately 4,000 cubic feet per barrel. This steady increase is typical of a solution gas drive reservoir. Texaco tested the well at
various rates to determine sensitivity. The results of the testing are summarized as follows:

<table>
<thead>
<tr>
<th>Choke</th>
<th>Oil</th>
<th>Gas</th>
<th>Gas-Oil Ratio</th>
</tr>
</thead>
<tbody>
<tr>
<td>13/64&quot;</td>
<td>200 BOPD</td>
<td>785 MCFD</td>
<td>3,925 cubic feet/barrel</td>
</tr>
<tr>
<td>11/64&quot;</td>
<td>103 BOPD</td>
<td>429 MCFD</td>
<td>4,170 cubic feet/barrel</td>
</tr>
<tr>
<td>12/64&quot;</td>
<td>122 BOPD</td>
<td>556 MCFD</td>
<td>4,557 cubic feet/barrel</td>
</tr>
<tr>
<td>12.5/64&quot;</td>
<td>131 BOPD</td>
<td>600 MCFD</td>
<td>4,580 cubic feet/barrel</td>
</tr>
<tr>
<td>13/64&quot;</td>
<td>156 BOPD</td>
<td>693 MCFD</td>
<td>4,444 cubic feet/barrel</td>
</tr>
<tr>
<td>14/64&quot;</td>
<td>180 BOPD</td>
<td>800 MCFD</td>
<td>4,440 cubic feet/barrel</td>
</tr>
<tr>
<td>15/64&quot;</td>
<td>225 BOPD</td>
<td>910 MCFD</td>
<td>4,044 cubic feet/barrel</td>
</tr>
</tbody>
</table>

The testing showed that the gas-oil ratio is fairly constant, regardless of producing rate. The ratio declined slightly as rates were increased. Restricting production to stay within the current gas limit is not necessary to prevent waste. Texaco believes that an additional 58,000 BO will be recovered from the well as a result of a higher casinghead gas allowable, which will prevent assignment of penalized oil allowables.

As of July 1, the well is overproduced approximately 10,800 MCF of gas. Texaco requests that this overage be canceled.

**FINDINGS OF FACT**

1. Notice of this hearing was given to all parties entitled to notice at least ten days prior to the date of hearing.

2. The top allowable in the Blalock Lake, SE (Wolfcamp) Field is 215 BOPD and 430 MCFD.

3. The “M” Fee-Powell No. 1 was completed in April 2000 and produced 282 BOPD, 204 MCFD and 12 BWPD flowing through a 15/64” choke.

4. Assignment of a casinghead gas limit of 1,000 MCFD is necessary to prevent waste.
   a. The producing gas-oil ratio has increased from 723 cubic feet per barrel at initial completion to over 4,000 cubic feet per barrel currently.
   b. The producing gas-oil ratio varied only slightly between 4,000-4,500 cubic feet per barrel when producing rate is varied between 100 and 225 BOPD.
   c. The producing gas-oil ratio began to decline slightly as rates were increased during variable rate testing.
d. A minimum of 58,000 BO will be recovered from the subject well if the casinghead gas limit is increased to 1,000 MCFD.

5. As of July 1, the well is overproduced approximately 10,800 MCF of gas.

**CONCLUSIONS OF LAW**

1. Notice of this hearing was given as specified in the provisions of all regulatory codes.

2. All things have occurred or been accomplished to give the Commission jurisdiction in this matter.

3. Approval of increased net gas-oil ratio authority with a casinghead gas limit of 1,000 MCFD for the “M” Fee-Powell No. 1 in the Blalock Lake, SE (Wolfcamp) Field and cancellation of overproduction will prevent waste and will not harm correlative rights.

**RECOMMENDATION**

Based on the above findings and conclusions of law, the examiner recommends that the “M” Fee-Powell No. 1 in the Blalock Lake, SE (Wolfcamp) Field be authorized to produce under net gas-oil ratio authority with a daily gas limit of 1,000 MCFD and that all accumulated overproduction for this lease be canceled.

Respectfully submitted,

Donna K. Chandler
Technical Examiner